

ABSTRACT OF THE DISCLOSURE

The invention provides nucleic acid molecules, designated Tome-1 nucleic acid molecules, which encode Tome-1, a protein that modulates mitotic entry. The invention also provides recombinant expression vectors containing Tome-1 nucleic acid molecules and host cells into which the expression vectors have been introduced. The invention still further provides Tome-1 proteins, fusion proteins, antigenic peptides and anti-Tome-1 antibodies. The invention also provides methods for the identification of modulators of Tome-1, methods of modulating Tome-1, methods of modulating mitosis, and methods for the treatment of disorders aberrant cell proliferation, such as cancer.